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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WERNER OBRECHT and MARTIN MEZGER

Appeal 2012-012332
Application 09/739,034
Technology Center 1700

Before BEVERLY A. FRANKLIN, LINDA M. GAUDETTE, and
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

GAUDETTE, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's decision¹ twice rejecting claims 9 and 23-32 under 35 U.S.C. §103(a) as unpatentable over US '488² or DE '487³, each in view of JP '239⁴ or JP '630^{5,6}. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

Appellants do not present separate arguments in support of patentability of any particular claim or claim grouping. (*See generally*, Br. 8-12.) Accordingly, we decide the appeal as to all claims on the basis of claim 9, the sole independent claim, which is reproduced below from the Claims Appendix to the Appeal Brief:

9. A molded rubber body comprising a vulcanate rubber which comprise a rubber mixture comprising uncrosslinked, double-bond containing rubbers (A), crosslinked rubber particles (B), multifunctional isocyanates (C), wherein the amount of component (B) in the mixture is from 1 to 150 parts by weight and the amount of multifunctional isocyanates (C) is from 1 to 100 parts by weight, in each case based on 100 parts by weight (phr) of the rubber component (A) and wherein said crosslinked rubber particles (B) have particle diameters of from 5 to 1000 nm and swelling indices in toluene of from 1 to 15 and wherein the gel content of the rubber particles (B) is from 80 to 100 wt.% wherein said molded rubber body is selected from the group consisting of cable sheaths, hoses, drive belts, conveyor belts, roller coverings, tire components, shoe soles, gaskets, damping elements and membranes.

¹ Office Action mailed Sep. 15, 2011.

² US 6,127,488, issued Oct. 3, 2000.

³ DE 19701487 A1, published Jul. 1998 (as translated).

⁴ EP 57212239A, published Dec. 27, 1982 (as translated).

⁵ JP 05017630 A, published Jan. 26, 1993 (as translated).

⁶ Appeal Brief filed May 14, 2012 ("Br."), 7.

The issue in this appeal is: does a preponderance of the evidence favor the Examiner's determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to have added a polyisocyanate to the US '688 and DE '487 compositions based on the teachings of JP '239 or JP '630? (*See* Br. 9.) We answer this question in the affirmative for the reasons expressed in the Answer⁷.

Appellants do not dispute the Examiner's findings that US '688 and DE '487 disclose rubber mixtures for use in the manufacture of tire components, as claimed, with the exception that the mixtures do not include a multifunctional isocyanate, i.e., claim 9, component (C) (Ans. 2). (Br. 9.) Nor do Appellants dispute the Examiner's findings that JP '239 and JP '630 disclose "that polyisocyanate containing rubber formulations display excellent moldability and promote bonding of the rubber particles" (Ans. 2). (*See generally*, Br. 9-12.) However, Appellants disagree with the Examiner's finding that one of ordinary skill in the art would have been motivated to add a polyisocyanate to the US '688 and DE '487 compositions to improve their physical properties based on the teachings of the secondary references (Ans. 2-3). (*See generally*, Br. 9-12.)

Appellants argue, more specifically, the JP '239 composition includes numerous components and fails to provide any teaching or suggestion that the polyisocyanate component is responsible for improving properties such as high dynamic modulus. (*See id.* at 10-11.) The Examiner, in response to this argument, directs us to JP '239 p. 10, ll. 1-6, which "specifically refer[] to the reaction of the polyisocyanate and rubber, wherein an increase in both modulus of elasticity and elongation is seen." (Ans. 5.)

⁷ Examiner's Answer mailed Jun. 7, 2012 ("Ans.").

With respect to JP '630, Appellants argue the disclosed composition has adhesive properties which one of ordinary skill in the art would view as unsuitable for the production of molded rubber bodies of the type claimed. (*See* Br. at 10.) The Examiner responds by directing us to paragraphs [0001], [0010], and [0011] of JP '630 which explicitly teach the use of the disclosed compositions in the production of rubber block molded bodies. (*See* Ans. at 4.)

While Appellants contend they have “[u]nexpectedly . . . discovered that the claimed molded rubber bodies have little or no adhesiveness which would normally be associated with such a body formed with the addition of diisocyanates,” (Br. 10), they have not directed us to persuasive evidence of unexpected results. Nor have Appellants addressed the Examiner’s reasoned basis for concluding the claimed and modified prior art compositions, prior to curing, “would possess degrees of adhesiveness in much the same way that uncured epoxy glue possesses adhesiveness; however, once cured, . . . the modified prior art composition[s] would be non-adhesive in much the same way that the cured epoxy would be nonadhesive” (Ans. 5-6).

Based on the foregoing, we determine a preponderance of the evidence favors the Examiner’s determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to have added a polyisocyanate to the US '688 and DE '487 compositions based on the teachings of JP '239 or JP '630. Therefore, we affirm the Examiner’s decision to reject claims 9 and 23-32.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED

kmm